

The Effect of Moderate-Intensity Continuous Training with Game Two Touches on the Passing and Receiving Ability of U-15 Soccer Players

by Brillian Jacka Listyawan

Submission date: 05-Oct-2024 02:47PM (UTC+0700)

Submission ID: 2475720911

File name: aining_with_Game_Two_Touches_on_the_Passing_and_Rece.edited.docx (466.64K)

Word count: 3302

Character count: 19108



The Effect of Moderate-Intensity Continuous Training with Game Two Touches on the Passing and Receiving Ability of U-15 Soccer Players

Brilliant Jacka Listyawan¹, I Dewa Made Aryananda Wijaya Kusuma¹, Imam Syafi'i¹, David Agus Prianto¹

¹Universitas Negeri Surabaya, Surabaya, Indonesia

Corresponding Author: Brilliant Jacka Listyawan, brilliantjacka.19025@mhs.unesa.ac.id

Accepted for Publication: September 25, 2024

Published: September 30, 2024

DOI: <https://doi.org/10.26740/jses.v7n2.p66-73>

ABSTRACTS

Purpose: This study aimed to determine the influence of Moderate-Intensity Continuous Training (MICT) combined with a two-touch game on the passing and receiving abilities of Persebra U15 soccer players. MICT was conducted at an intensity of 40-60% of maximum heart rate for 45 minutes per session, three times a week, for six weeks. Players performed continuous passing and receiving drills within a small-sided game that allowed a maximum of two touches per player.

Materials and Methods: This study used a one-group pretest-posttest experimental design with 10 Persebra U15 players. Passing and receiving skills were assessed using standard tests before and after the 6-week intervention.

Result: Paired t-test analysis showed a significant improvement in mean passing and receiving scores from pre- to post-test (mean difference 1.0, $p=0.015$).

Conclusion: The findings suggest that MICT combined with a two-touch, small-sided game can effectively enhance the essential technical skills of young soccer players. Improving passing and receiving abilities through structured training leads to the positive development of individual playing skills and team performance.

Keywords: Football, Passing, Receiving, MICT, Two touch game.

INTRODUCTION

The passing technique is the most fundamental in football, and it must be mastered from an early age and continuously trained. "Passing is the most dominant basic technique done in the game of football, passing is the art of moving the ball from one player to another" (Mielke, 2007). Even though the effectiveness of passing techniques is essential for developing young players, it highlights the importance of mastering basic passing skills early (Putra & Bahtra, 2021). Accurate passing quality plays a crucial role in facilitating scoring opportunities and overall game strategy (Ratyonono, 2022). In addition to passing, the basic technique that supports the passing technique is the receiving the ball technique, which is a technique for receiving the ball so the player can make the next decision. "Before receiving the ball, paying attention to information about the opposing player with a visual search strategy during receiving the ball shows that the position and situation of teammates and opponents is the most important source of information for accurate and consistent passing decisions" (Natsuhara, 2022).

Passing is the most dominant basic technique used in football (Pujianto et al., 2020). Passing is the art of moving the ball from one player to another (Muhammad Sidik et al., 2021). Passing is the most dominant basic technique in football; passing is the art of moving the ball from one player to another (Soniawan et al., 2021). In addition to passing, the basic technique that supports the passing technique is the receiving the ball technique, which is the technique of receiving the ball so the player can make the next decision (Marsuna, 2024). The performance of passing and receiving short passes is essential because it reflects the player's touch skills, passing accuracy, and passing stability (Hui et al., 2022).

Small-sided games are training to control a series of variables that affect the intensity of training, such as the area of the field, the number of players, coach feedback, training planning (continuous manipulation or intervals and rest times), modification of rules, and the use of goals and goalkeepers (Clemente et al., 2021). The SSG method can improve the ability of passing accuracy (Asrul et al., 2021). Small-side games can improve basic technical skills playing football; this is in line with Putra et al. (2024) "stated that the SSG model is an effective strategy to improve basic engineering skills". SSG's training methods significantly influence the basic skills of football (Rambe, 2024). In the last decade, SSG has emerged as one of the most effective training methods for early age, focusing on improving basic technical skills such as passing, dribbling, and shooting (Beiderbeck et al., 2023).

Good ball-receiving skills can improve performance in football matches. Special exercises can improve pass-receiving skills (Hui, 2024). As a football player, you must be required to think quickly, the thing that needs to be considered is that scanning is done before receiving a pass – players who can have a high probability of passing (Jordet et al., 2020). Players with good eye-foot coordination can improve passing quality (Akmal et al., 2022). Good passing ability can be supported by players who make movements without the ball and are coordinated by players when possessing the ball (Matsubara et al., 2022).

Based on observations made by researchers at Persebra at the age of 15, it was seen that there were still many players who had not mastered both passing and receiving ball techniques, this was shown when players during training made mistakes during passing and receiving. In the interview process with the coach, he said that the players lacked the ability to pass and receive. However, many players still make mistakes when receiving the ball; besides that, many players are bored and do not take it seriously during the passing drills practice material, so many players make perfunctory passes. Researchers are looking for solutions to improve passing and receiving skills. Providing varied training can improve the essential technical skills of football players (Rizhardi, 2020).

To improve passing and receiving skills, the Moderate Intensity Continuous Training (MICT) with game two-touch training method describes exercises carried out continuously with moderate intensity. MICT has a lower intensity volume than HIIT (Williams et al., 2019). The continuous training method habituates the performance of the player's organs to work at moderate intensity for a long time (Sukadiyanto, 2011). This exercise combines the above problems with MICT with game two touch; the players pass and receive continuously with medium time and intensity, so it is carried out for a long time by the characteristics of the football game. MICT effectively increases football players' muscular endurance (Fang et al., 2021).

MICT exercises have lower intensity and longer (Cao et al., 2019). MICT lasts for 55 minutes per session. Warming up for 5 minutes increases heart rate reserve by about 20-40%. Next,

exercise for 45 minutes with an HR of 40<60% and the volume is 250 kcal. The 5-minute cool-down session begins shortly after completing the workout (Ruslan et al., 2022). HR from technical training is about 62.1 Hrmax (Condessa et al., 2015). The novelty in this study is the use of holistic training methods to improve football players' passing and receiving abilities. Football also demands that mistakes be minimized for each individual player, such as mistakes that are still often made, namely basic technical errors, both passing and receiving. With holistic practice, you can improve your passing ability (Gunawan & Doewes, 2023). So, it is interesting to research whether there is an influence of MICT with game two touches on the passing and receiving ability of Persebra U15 players.

So far, there has been no research on the effect of MICT with game two touch on the passing and receiving ability of the ball. The research is relevant to previous research such as journals researched by (Malik et al., 2022) entitled "pengaruh variasi latihan small side games terhadap kemampuan passing sepakbola pemain usia 11-13 tahun SSB TASBI", Journals researched by (A. Anwar et al., 2019) "Football Passing and Control Skills Exercise Model Based on Small Side Games For Ages 12-14 Years".

METHODS

Study Participants: This study used a population of 10 Persebra U15 soccer players. The sample used a total sampling technique from the entire population of 10 players. The study employed a one-group pre-experimental design with pretest and post-test measurements. The instruments used were test passing and stopping (Widiastuti, 2015).

Study Organization: The soccer training method implemented in this study consisted of 2 sessions over six weeks. In weeks 1 and 2, the training focused on improving basic skills such as passing and receiving through 5v5. Players played two touch games for 30 minutes, set 1 for 15 minutes, rest for 5 minutes, and set 2 for 15 minutes with a training area of 20-40 meters. Then, in weeks 3 and 4, there was an increase in training time, namely session 1 for 20 minutes, rest for 5 minutes, and session 2 for 20 minutes. Finally, in weeks 5 and 6, set 1 for 20 minutes, rest for 4, and set 2 for 20 minutes. Players actively run during training to achieve the target HR of 60%-80% HR max. The coach continuously monitors the exercise intensity with a heart rate monitor (oximeter) to stay in the MICT zone. To control the intensity of MICT training sessions, heart rate monitors (oxymeters) were used to measure each player's heart rate throughout the sessions. Intensity was 40-60% of the maximum heart rate based on the age-predicted formula (Lu et al., 2019). Training load was monitored and gradually progressed using the rating of perceived exertion scale

Statistical Analysis: Data were analyzed using IBM SPSS Statistics version 22. Normality was assessed using the Shapiro-Wilk test. Differences in pre-post scores were analyzed with paired sample t-tests at $p < 0.05$ significance.

RESULT

Table 1. Result in Pretest and Posttest

No.	Name	Pretest	Posttest
1.	MRF	10	12
2.	RFN	6	7

3.	RNG	3	5
4.	HSM	6	6
5.	AFQ	7	6
6.	HLM	7	6
7.	FDS	5	8
8.	ADM	7	8
9.	AMN	8	9
10.	DNS	7	9

Table 2. Analysis Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	10	3	10	6,50	1,841
Posttest	10	5	12	7,50	2,014

Table 3. Normality Test

Variable	Shapiro-Wilk			
	Statistic	Df	Sig	Status
Pretest	,949	10	,657	Normal
Posttest	,896	19	,196	Normal

*Note: the data results have a sig value > 0.05, then the data results in this study are typically distributed

Table 4. Paired Sample T-test

Paired Differences							
Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
-1,000	1,054	,333	-1,754	-,246	-3,000	9	,015

DISCUSSION

The results showed that the average passing and receiving scores increased significantly after being treated with MICT training with two touch games for six weeks. The average difference between the pretest and post-test was 1 point with a sig value of 0.015 (<0.05), indicating a real increase in technical ability. This is in line with the research objective of determining the effect of training on the basic abilities of players. This increase indicates that the training helps develop players' technical skills, such as passing and receiving. With the improvement of these skills, it is expected to have a positive impact on the overall quality of team play. This finding aligns with previous research stating that skill-based training can significantly improve player competence.

Improving the ability of passing and receiving techniques with a two-touch game can improve the quality of basic passing and receiving techniques. This study's findings align with research conducted by Imamy et al. (2023), which concluded that Small-Sided Games-based training significantly improves players' passing ability. In addition to improving technical skills, this study trains physical abilities. Research by Asrul et al. (2021) also showed that the SSG method significantly improved the passing accuracy and aerobic ability of players compared to the drill training method. This shows the benefits of game-based training in honing basic skills. This

conclusion is in line with the results of research by Malik et al. (2022), which states that providing variations of SSC training significantly improves players' passing ability. Variations in the form of game rules and the number of players can increase the intensity of training. The MICT with game two touch research conducted for six weeks significantly influenced the improvement of the passing and receiving abilities of Persebra U15 players. So this research is in line with the research carried out by Anwar et al. (2024). SSG practice of the 5v5 variation with two touches can significantly improve passing quality. This is also supported by Cofano et al. (2017), who state that 5v5 is more effective for improving the technical abilities of soccer players.

In modern football, passing and receiving techniques are very important in building team attacks and maintaining possession of the ball. These two techniques are the foundation that players must master to play effectively. Therefore, coaches often train these skills from an early age. MICT training with two-touch games is appropriate because it can train these skills continuously in actual playing situations. This technique will continue to be improved according to the development of football. This is supported by research by Hui (2024), which discusses a unique training program to improve passing and receiving skills in accordance with modern football trends. The small-side game method is a training trend in modern football. This is supported by research by Clemente et al. (2021). The SSG program has significantly increased the technical ability of young players.

CONCLUSION

Based on the study's results, it can be concluded that MICT with the game Two Touch significantly influences the passing and receiving of Persebra U15 players. Thus, MICT with the game Two Touch is one suitable alternative to improving passing and receiving skills.

ACKNOWLEDGMENT

Thanks to the help of various parties, this research can run well and smoothly. For that, the researcher would like to thank the previous researchers as references in this study and all Persebra U15 players and administrators who are willing to be a sample in this study.

CONFLICT OF INTEREST

The authors announce that there are no clashes of intrigue concerning the distribution of this consider

REFERENCES

- Akmal, J., Hasibuan, S., & Sunarno, A. (2022). Effect of Eye and Feet Coordination, Strenghth, Speed on Passing Accuracy in SSB Kaban Jahe. *Indonesia Sport Journal*, 5(2), 38. <https://doi.org/10.24114/isj.v5i2.37885>
- Anwar, A., Widiastuti, W., & Setiakarnawijaya, Y. (2019). Football Passing and Control Skills Exercise Model Based on Small Side Games For Ages 12-14 Years. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 2(3), 481-493. <https://doi.org/10.33258/birle.v2i3.420>
- Anwar, G. M., Hanief, Y. N., Supriatna, Azidin, R. M. F. R., Amiq, F., M., B. A., & Carmen, M. (2024). Examining the influence of eight weeks of small-sided games (SSGs) enhancing pass

- accuracy and eye-foot coordination: a factorial experimental design. *Journal of Physical Education and Sport*, 24(2), 275–282. <https://doi.org/10.7752/jpes.2024.02033>
- Asrul, M., Nugraha, T., & Kasih, I. (2021). Differences in the Effect of Small Sided Game and Drill Training Methods on Passing Accuracy and V02Max in Football Games in High School Students. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 458–464. <https://doi.org/10.33258/birci.v4i1.1627>
- Beiderbeck, D., Evans, N., Frevel, N., & Schmidt, S. L. (2023). The impact of technology on the future of football – A global Delphi study. *Technological Forecasting and Social Change*, 187(November 2022), 122186. <https://doi.org/10.1016/j.techfore.2022.122186>
- Cao, M., Quan, M., & Zhuang, J. (2019). Effect of high-intensity interval training versus moderate-intensity continuous training on cardiorespiratory fitness in children and adolescents: A meta-analysis. *International Journal of Environmental Research and Public Health*, 16(9). <https://doi.org/10.3390/ijerph16091533>
- Clemente, F. M., Ramirez-Campillo, R., Sarmiento, H., Praça, G. M., Afonso, J., Silva, A. F., Rosemann, T., & Knechtle, B. (2021). Effects of Small-Sided Game Interventions on the Technical Execution and Tactical Behaviors of Young and Youth Team Sports Players: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 12(May). <https://doi.org/10.3389/fpsyg.2021.667041>
- Cofano, G., Sannicandro, I., & Cofano, G. (2017). *Small-Sided Games : Analysis of the Internal Load and Technical Skills in Young Soccer Players*. *Small-Sided Games : Analysis of the Internal Load and Technical Skills in Young Soccer Players*. 6(March), 735–739. <https://doi.org/10.21275/ART20171583>
- Condessa, L. A., Cabido, C. E. T., Lima, A. M., Coelho, D. B., Rodrigues, V. M., Chagas, M. H., & Garcia, E. S. (2015). Analysis and comparison of intensity in specific soccer training sessions. *Motriz. Revista de Educacao Fisica*, 21(1), 54–60. <https://doi.org/10.1590/S1980-65742015000100007>
- Fang, B., Kim, Y., & Choi, M. (2021). Effect of cycle-based high-intensity interval training and moderate to moderate-intensity continuous training in adolescent soccer players. *Healthcare (Switzerland)*, 9(12). <https://doi.org/10.3390/healthcare9121628>
- Gunawan, E., & Doewes, R. I. (2023). *Passing Holistik untuk Meningkatkan Kualitas Passing pada Pemain Pasopati Football Academy Surakarta Kelompok Umur 13 Tahun*. 22, 11–15. <https://doi.org/https://doi.org/10.20961/smsp.v22i1.73238>
- Hui, T. (2024). The Development of Specific Training Programs to Improve the Speed, Agility, Quickness, and Pass-Receiving Performance of Soccer Players. *Ijsasr*, 4(2), 241–250. <https://doi.org/10.60027/ijssr.2024.3855>
- Hui, T., Marsuna, M., Soniawan, V., Setiawan, Y., Edmizal, E., Ratiyono, Natsuhara, T., Kato, T., Nakayama, M., Yoshida, T., Sasaki, R., Matsutake, T., Asai, T., Kahla, A. B., Elghoul, Y., Ammar, A., Masmoudi, L., Trabelsi, K., Glenn, J. M., ... Sunarno, A. (2022). Bilateral Training Improves Agility and Accuracy for Both Preferred and Non-Preferred Legs in Young Soccer Players. *Perceptual and Motor Skills*, 10(1), 241–250. <https://doi.org/10.24114/isj.v5i2.37885>
- Imamy, J., Anwar, K., Hidayatullah, F., & Himawan, A. (2023). The Influence of Small-Sided Games Training on Football Passing Accuracy in Dekate FC Bangkalan Players. *COMPETITOR: Jurnal Pendidikan Kepeleatihan Olahraga*, 15(2), 411. <https://doi.org/10.26858/cjeko.v15i2.48356>

- Jordet, G., Aksum, K. M., Pedersen, D. N., Walvekar, A., Trivedi, A., McCall, A., Ivarsson, A., & Priestley, D. (2020). Scanning, Contextual Factors, and Association With Performance in English Premier League Footballers: An Investigation Across a Season. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.553813>
- Malik, A., Hasibuan, M. N., & Nurkadri, N. (2022). Pengaruh Variasi Latihan Small Side Games terhadap Kemampuan Passing Sepakbola Pemain Usia 11-13 Tahun SSB TASBI Tahun 2021. *Jurnal Speed (Sport, Physical Education, Empowerment)*, 5(01), 1-7. <https://doi.org/10.35706/jurnalspeed.v5i01.6505>
- Marsuna, M. (2024). Improved Passing Accuracy by Using Pair Practice in Adolescent Soccer Players. *Jurnal Sportif Jurnal Penelitian Pembelajaran*, 10(1), 31-46. https://doi.org/10.29407/js_unpgri.v10i1.21732
- Matsubara, H., Kida, N., & Nomura, T. (2022). A Study on Support Play in Soccer Games: Relationship Between Player Positioning and Zone. *Advances in Physical Education*, 12(03), 271-282. <https://doi.org/10.4236/ape.2022.123021>
- Mielke, D. (2007). *Dasar-dasar Sepakbola*. Pakar Raya.
- Muhammad Sidik, N., Kurniawan, F., & Effendi, R. (2021). Pengaruh Latihan Sepakbola Empat Gawang Terhadap Kemampuan Passing Stopping Sepakbola Ekstrakurikuler di SMP Islam Karawang. *Jurnal Literasi Olahraga*, 2(1), 60-67. <https://doi.org/10.35706/jlo.v2i1.4434>
- Pujianto, D., Sutisyana, A., Arwin, A., & Nopiyanto, Y. E. (2020). Pengembangan Model Latihan Passing Sepakbola Berbasis Sasaran Teman. *Journal Coaching Education Sports*, 1(1), 1-12. <https://doi.org/10.31599/jces.v1i1.81>
- Putra, A. N., & Bahtra, R. (2021). *The Effectiveness of the GAG Training Model in Improving the Basic Technical Skills of Soccer Passing*. <https://doi.org/10.2991/assehr.k.210618.053>
- Putra, A. N., Edmizal, E., Wulandari, I., Amra, F., & Munir, A. (2024). *Small Sided Games Training Model to Improve Basic First Touch Football Technical Skills of Football School Students*. 7(1), 24-31. <https://doi.org/https://doi.org/10.23887/jlls.v7i1.74948>
- Rambe, A. Z. F. (2024). Improvement of Basic Soccer Techniques With Training Methods and Physical Condition. *Jurnal Sportif Jurnal Penelitian Pembelajaran*, 10(1), 76-89. https://doi.org/10.29407/js_unpgri.v10i1.21575
- Ratiyono. (2022). The Effect of Muscle Flexibility on the Passing Ability of Football School Players of Nusa Fc U 14-17 in Padang. *Gladi Jurnal Ilmu Keolahragaan*, 13(1), 110-118. <https://doi.org/10.21009/gjik.131.10>
- Rizhardi, R. (2020). Latihan Kolaboratif Dalam Meningkatkan Kemampuan Teknik Dasar Bermain Sepakbola Siswa. *Halaman Olahraga Nusantara (Jurnal Ilmu Keolahragaan)*, 3(1), 1. <https://doi.org/10.31851/hon.v3i1.3510>
- Ruslan, S., Ilias, N. F., Azidin, R. M. F. R., Omar, M., Ghani, R. A., & Ismail, H. (2022). Effect of high intensity interval training and moderate intensity continuous training on blood pressure and blood glucose among T2DM patients. *Journal of Physical Education and Sport*, 22(10), 2334-2339. <https://doi.org/10.7752/jpes.2022.10297>
- Soniawan, V., Setiawan, Y., & Edmizal, E. (2021). *An Analysis of the Soccer Passing Technique Skills*. <https://doi.org/10.2991/ahsr.k.210130.005>
- Sukadiyanto. (2011). *Pengantar Teori Dan Metodologi Melatih Fisik*. Lubuk Agung.
- Widiastuti. (2015). *Tes dan pengukuran olahraga*. Rajawali Pres.

Williams, C. J., Gurd, B. J., Bonafiglia, J. T., Voisin, S., Li, Z., Harvey, N., Croci, I., Taylor, J. L., Gajanand, T., Ramos, J. S., Fassett, R. G., Little, J. P., Francois, M. E., Hearon, C. M., Sarma, S., Janssen, S. L. J. E., Van Craenenbroeck, E. M., Beckers, P., Cornelissen, V. A., ... Coombes, J. S. (2019). A multi-center comparison of VO₂peak trainability between interval training and moderate intensity continuous training. *Frontiers in Physiology*, 10(FEB). <https://doi.org/10.3389/fphys.2019.00019>

The Effect of Moderate-Intensity Continuous Training with Game Two Touches on the Passing and Receiving Ability of U-15 Soccer Players

ORIGINALITY REPORT

18%

SIMILARITY INDEX

16%

INTERNET SOURCES

10%

PUBLICATIONS

2%

STUDENT PAPERS

PRIMARY SOURCES

1	tmfv.com.ua Internet Source	4%
2	ojs.unm.ac.id Internet Source	2%
3	jurnal.univpgri-palembang.ac.id Internet Source	1%
4	www.researchgate.net Internet Source	1%
5	Submitted to Universitas Negeri Surabaya The State University of Surabaya Student Paper	1%
6	files.aiscience.org Internet Source	1%
7	hdl.handle.net Internet Source	1%
8	link.springer.com Internet Source	1%

9

Bayu Dwi Susanto, Zainal Afandi, Setyo Harmono. "Development of Basic Beach Volleyball Technique Training Program for Intermediate Class", Journal Coaching Education Sports, 2023

Publication

<1 %

10

Johnson, Timothy. "Cognitive Changes Induced on Executive Functions Through Video Gameplay", Grand Canyon University, 2024

Publication

<1 %

11

repository.unipasby.ac.id

Internet Source

<1 %

12

www.tmfv.com.ua

Internet Source

<1 %

13

Chrissandra Intan Lube, Siti Nuraeni. "IMPROVING ENGLISH VOCABULARY MASTERY THROUGH WORD GAME", PROJECT (Professional Journal of English Education), 2020

Publication

<1 %

14

doaj.org

Internet Source

<1 %

15

ejournal.karinosseff.org

Internet Source

<1 %

16

hrcak.srce.hr

Internet Source

<1 %

17

hull-repository.worktribe.com

Internet Source

<1 %

18

ojs.unpkediri.ac.id

Internet Source

<1 %

19

Honorato Sousa, Élvio Rúbio Gouveia, Adilson Marques, Hugo Sarmento et al. "The Influence of Small-Sided Football Games with Numerical Variability in External Training Load", Sustainability, 2022

Publication

<1 %

20

cev.org.br

Internet Source

<1 %

21

discovery.researcher.life

Internet Source

<1 %

22

findresearcher.sdu.dk

Internet Source

<1 %

23

journal.unesa.ac.id

Internet Source

<1 %

24

journal.unj.ac.id

Internet Source

<1 %

25

Dinda Dwi Cahyuni, Iyakrus Iyakrus, Wahyu Indra Bayu. "Development of a Model for Preparing an Exercise Program to Improve

<1 %

the Physical Condition of Table Tennis Club
Athletes in the City of Lubuklinggau Through
the Application", Kinestetik : Jurnal Ilmiah
Pendidikan Jasmani, 2022

Publication

26

eprints.uny.ac.id

Internet Source

<1 %

Exclude quotes On

Exclude matches Off

Exclude bibliography On